

## *In the Forefront*

# Closing the Communication Gap in Cancer Care

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THE INTENT OF PUBLIC LAW 89-239 (Heart Disease, Cancer and Stroke Amendments) was to narrow the gap between what was known and what was done in the management of the three killer diseases, heart disease, cancer and stroke. Since implementation of this law, under the aegis of the Regional Medical Program (RMP), many proposals were presented, authorized, and funded relating to the conquest of heart disease and the prevention and treatment of stroke. Similar proposals for cancer were expected, but did not materialize in any significant amount. In spite of the interest and urging of local branches of the American Cancer Society, there still existed a wide communication problem between the potential cure and the real cure of this disease. This gap applied equally to practicing physicians and potential patients and explained the reluctance of planning efforts in developing and submitting Regional Medical Program proposals in the cancer category.

More than one third of all cancer patients in the United States are being saved today. To the optimist this is reassuring, but to the pessimist it is distressing.

The Area I planners of the California Regional Medical Programs, working closely with the Cancer Society representatives, decided on a positive and aggressive approach to the problem of providing comprehensive care to cancer patients in Northwestern California. More importantly, whenever feasible, this care would be made available in the patient's own community.

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Within Area I, two medical facilities, the University of California, San Francisco and the Claire Zellerbach Saroni Tumor Institute of Mount Zion Hospital and Medical Center, possessed broad based oncology programs; and although they are geographically and administratively separate, they have previously cooperated in joint programs of cancer education, research and patient care. These cancer centers pledged their resources, personnel, equipment, and expertise to a joint effort to extend their services in a broad based cancer educational program involving dozens of peripheral institutions and medical groups. The services of both cancer centers were further crystallized by the formation of a Cancer Coordinating Committee and appointment of a Cancer Coordinator.

In order to meet the needs of the patients of Area I with current resources, four major subprograms were implemented to enable more effective utilization and extension of the available resources.

1. The first subprogram was the Clinical Cancer Consultation Service which provides consultant teams to participating hospitals. If a hospital did not feel that it required a complete cancer management team, it would have the option of receiving aid from any particular specialists desired. These include radiation therapy, chemotherapy, surgery, nuclear medicine and the social sciences. Physicians and paramedical consultants would be available to attend local tumor boards biweekly or monthly or to attend clinics and treatment sessions in their specialties. Members of the Cancer Consultation team would also assist personnel at the participating hospitals to

develop their own program, particularly programs in cancer chemotherapy and radiotherapy. The members of the team would provide advice on the construction of facilities; architectural consultation would also be made available. The educational opportunities accessible to local personnel were stressed; these teams also actively attempted to attract prospective trainees to the ongoing preceptorship programs at the established cancer facilities.

2. The second portion of the program was a radiological physics service. This program was devised to assist the available radiotherapy resources to use their present equipment in an optimum fashion, applying the modern radiotherapeutic techniques. Because of the extreme shortage of radiation physicists and equipment, it was evident that a regional effort would lead to a more rapid and adequate provision of these services. Certain installations could not afford to employ a full time radiation physicist; this could be solved by the use of a regional program. In addition, the pooling of resources would enable the use of sophisticated computer techniques to solve many problems which previously required hours of laborious hand calculations.

3. The third portion was a computerized data retrieval service. This system eventually will be provided to participating hospitals on request and will serve as a memory bank of information about individual patients treated by means of radiotherapy, chemotherapy and surgical operation. It will be possible to put many informational items about each patient into computer tapes and on short notice to retrieve current information on the results of a given treatment technique in one hospital as compared with the region as a whole. This service will enable the individual hospital to evaluate its own performance in the cancer field. The data retrieval service will also act as an important part of the overall evaluation of this regional program. It is anticipated that both the data retrieval and the regional medical physics programs will serve to meet continuing needs for many years to come.

4. The fourth portion consisted of an educational program for medical, paramedical and lay public. Educational aspects were, of course, included in each of the other three subprograms and it was probably within those portions of the

program that the greatest opportunity for education occurred.

During the almost two years of the program's activities, literally hundreds of radiotherapy consultations were made by personal visits to local hospital radiotherapy departments, radiologists' offices, tumor board meetings and cancer seminars (away from the medical centers). Likewise consultation on request was provided regarding the need for special or additional radiotherapy equipment and the appropriate equipment when indicated.

Radiophysics consultations\* for dosimetry determinations and equipment calibration far exceeded expectations. Treatment planning via computer and telo-communication between peripheral and central institutions became commonplace.

Tumor boards were formed where none previously existed, and flourished with the input from the visiting specialists in chemotherapy, radiotherapy, surgical and gynecological oncology. Existing tumor boards were enhanced and augmented in the same manner. The rotating tumor board concept proved extremely valuable in large counties with multiple hospitals having different staffs. As a result of these educational activities, more interest was generated locally in the comprehensive management of cancer patients, including their non-medical needs.

The computerized data retrieval system was refined and tested in the second year of the program and soon will be implemented in several San Francisco Bay Area hospitals for further testing. Following this phase, it may be adopted by any cancer service in the nation.

Several unexpected spin-offs have resulted from the overall cancer program. The exposure of the visiting cancer consultants to the physicians in peripheral communities inspired the formation of the Northern California Academy for Clinical Oncology. The membership of this organization had a common interest—the care of cancer victims. At last count there was a total of 150 radiotherapists, chemotherapists, surgeons, gynecologists, generalists and internists on the referral roster. About 100 regularly attend the quarterly scientific sessions held in San Francisco. These meetings have afforded interchange of the latest information on all aspects of cancer and thus serve a most useful purpose.

\*Approximately 50 such visits were made per month.

It was at one of the early meetings of this group that the need for training programs for radiotherapy technologists and nuclear medicine technologists and technicians was enunciated. After documentation of this need and verification of future job opportunities, discussions were held with the appropriate educational institutions and commitments were obtained that resulted in positive action.

The radiotherapy technologists training program is in operation at San Francisco City College with 13 trainees. Clinical instruction for one year will be given at the University of California, San Francisco and the Claire Zellerbach Saroni Tumor Institute, Mount Zion Hospital.

The nuclear medicine program is still in the curriculum development phase because of the necessity of involving both a two-year and a four-year educational institution in the academic portion of the training. Clinical and laboratory instruction will again be given at the University of California, San Francisco, and Mount Zion Hospital.

Another spin-off is the adaptation of the team approach to cancer management. The realization that cancer is a complex disease and that many effective methods of treatment are now available has resulted in the use of a variety of health professionals working in close cooperation. Both the patients and the healers profit from this arrangement.

The accomplishments of the program to date are measurable, both quantitatively and qualitatively. Written reports from the users of the services have indicated that many more patients have been seen at tumor boards than previously, many more local physicians have attended tumor board meetings, and many more patients have received earlier and more effective treatment in their home localities as a result of these activities. Furthermore, the treatment has been given with greater confidence by their own physicians.

In summary, then, the efforts of two enlightened cancer centers to spread their knowledge and their techniques to other and often far away groups were described in this article. The vehicle making these efforts possible was the Regional Medical Programs. Although the cancer component of RMP has not been as "popular" as the other categories, this Area I Cancer Program is an example of what can be done rather inexpensively and most effectively.

What, then, can be held in prospect for the future in RMP supported cancer programs in Area I? A proposal now in preparation which would continue the above mentioned programs on a cost recovery or charge basis. This would allow for partial funding of new programs hitherto not in existence and requested by the users of the previous program. These would include:

1. Health Manpower Training
  - a. Augmentation of the radiation therapy technology training with provision of a full time coordinator, based at San Francisco City College.
  - b. Training of cancer social workers and social work assistants for cancer counseling.
  - c. Tumor registry training program to enable physicians and non-physicians to make better use of tumor registries.
  - d. The training of general oncologists for the joint practice of radiation therapy and chemotherapy.
2. Application of the Team Concept in Cancer Care

A series of conferences for nurses, social workers, Cancer Society staff members and volunteers, nursing students, physicians and dentists will be held. The use of "mock" tumor boards and patient counseling sessions will help to demonstrate the techniques necessary to accomplish this objective.